

SPEAKER:

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TITLE:

The Teukolsky equation on Kerr in the full subextremal range

ABSTRACT:

The Teukolsky equation is one of the fundamental equations governing linear gravitational perturbations of the Kerr black hole family as solutions to the vacuum Einstein equations. I will discuss joint work with Yakov Shlapentokh-Rothman (Toronto), where we show that solutions arising from suitably regular initial data decay inverse polynomially in time. Our proof holds for the entire subextremal range of Kerr black hole parameters, ($|a| < M$).